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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--|-----------------|----------------------|---------------------|-----------------|
| 09/585,573 | 06/02/2000 | Hiroshi Tsumura | PM 270735/SH-0020US | 9140 |
| | 7590 03/13/2002 | | | |
| PILLSBURY WINTHROP LLP 1100 NEW YORK AVENUE, N.W. | | | EXAMINER | |
| 9TH FLOOR | | | VINCENT, SEAN E | |
| WASHINGT | ON, DC 20005 | | ART UNIT | PAPER NUMBER |
| | | | 1731 | 5- |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|--|--|
| Office Action Comme | 09/585,573 | TSUMURA ET AL. |
| Office Action Summary | Examiner | Art Unit |
| | Sean E Vincent | 1731 |
| The MAILING DATE of this communication Period for Reply | | |
| A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATIO - Estentions of time may be available under the provisions of 37 CPI - after SIX 69 (MOXTHS from the mailing-dist the priorison of 37 CPI - after SIX 69 (MOXTHS from the mailing-dist the priorison of 37 CPI - after SIX 69 (MOXTHS from the mailing-dist the priorison of 37 CPI - If the period for reply specified above, the maximum statutory part - Failure to reply within the set or extended period for reply will, by six - Any reply received by the Office later than three months after the m - camed patent term adjustment. See 37 CPR 1.704(b). Status | DN. R 1.136(a). In no event, however, may a repl , reply within the statutory minimum of thirty (; riod will apply and will expire SIX (6) MONTH attle course the application to become ABAN | y be timely filed 30) days will be considered timely. S from the mailing date of this communication. |
| 1) Responsive to communication(s) filed on | | |
| 2a) ☐ This action is FINAL. 2b) ☑ | This action is non-final. | |
| Since this application is in condition for all closed in accordance with the practice unconsposition of Claims | owance except for formal matte der <i>Ex parte Quayle</i> , 1935 C.D. | rs, prosecution as to the ments is 11, 453 O.G. 213. |
| 4) Claim(s) 1-36 is/are pending in the applica- | tion. | |
| 4a) Of the above claim(s) is/are without | drawn from consideration. | |
| 5) Claim(s) is/are allowed. | | |
| 6)⊠ Claim(s) <u>1-36</u> is/are rejected. | | |
| 7) Claim(s) is/are objected to. | | |
| Claim(s) are subject to restriction and Application Papers | d/or election requirement. | |
| 9) The specification is objected to by the Exami | iner. | |
| 10) The drawing(s) filed on is/are: a) □ ac | cepted or b) objected to by the | Examiner. |
| Applicant may not request that any objection to | | |
| 11) The proposed drawing correction filed on | | |
| If approved, corrected drawings are required in | reply to this Office action. | |
| 12) The oath or declaration is objected to by the | Examiner. | |
| riority under 35 U.S.C. §§ 119 and 120 | | |
| 13) Acknowledgment is made of a claim for fore | eign priority under 35 U.S.C. § 1 | 19(a)-(d) or (f). |
| a)⊠ All b)□ Some * c)□ None of: | | |
| Certified copies of the priority docume | ents have been received. | |
| Certified copies of the priority docume | ents have been received in Appl | ication No |
| Copies of the certified copies of the praphication from the International I See the attached detailed Office action for a li | riority documents have been red Bureau (PCT Rule 17,2(a)). | eived in this National Stage |
| 14) Acknowledgment is made of a claim for dome | | |
| a) The translation of the foreign language particle. The translation of the foreign language particle. Acknowledgment is made of a claim for dome | provisional application has been | received. |
| ttachment(s) | . , | |
| Notice of References Cited (PTC-892) Notice of Draftsperson's Patent Drawing Review (PTC-948) Information Disclosure Statement(s) (PTC-1449) Paper No(s) | 5) Notice of Infor | mary (PTO-413) Paper No(s) mal Patent Application (PTO-152) |
| Patent and Trademark Office O-326 (Rev. 04-01) Office | Action Summary | Part of Paper No. 5 |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- Claims 28-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention
- Claim 28 recites the limitation "said supplying and hydrolizing" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-5 and 24 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by McMenamin (EP 040540). The features of applicant's claims can be found in the abstract, figure 1, and pages 5-10. Note the presence of control valve 26, temperature controller 48, flow controller 40 and pressure sensor 50 and the use of each.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a perso having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 6, 7, 16-23, 25 and 27-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMenamin in view of Saitoh et al (US 5250097).
- 8. McMenamin does not elaborate on the "using system" to which the raw material vapors is sent. Saitoh et al teaches apparatus and methods of producing glass soot by hydrolyzing glass forming raw material using a burner (see figures, col. 2, line 10 to col.3, line 12). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to connect the vapor supply means of McMenamin to the hydrolyzing "using system" of Saitoh et al because the system of McMenamin was expected to be connected to a compatible deposition system and the system of Saitoh et al was expected to be connected to a compatible vaporization system. Neither reference specifies or excludes connected systems.
- 9. In the above combination, a circulating water cooling system in the reacting vessel is anticipated by Saitoh et al and vessel temperatures of 50°C to 150 °C were disclosed. Saitoh et al does not teach placing anticorrosive or antiblastic chemicals in the circulating water. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to add such chemicals to a circulating water cooling system because coolant additives were well known in the cooling arts.

- 10. Claims 8-15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMenamin and Saitoh et al as applied to claims 6 and 25 above, and further in view of JP 9-110457
- 11. McMenamin and Saitoh et al fail to disclose a filter for the raw material gas supplied to the reaction vessel. JP 9-110457 teaches placing filters on all the gas feeds going into the furnace core tube including the raw material feed (see English abstract and figures 1 and 2). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to place a filter in the raw material feed line of McMenamin and Saitoh et al because JP 9-110457 taught that it would have removed harmful particles.
- 12. JP 9-110457 does not teach a filter type. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the claimed filter types because they would have been well known in the filtering arts.

Conclusion

- 13. The prior art made of record and not relied upon is cited to further show the state of the art. US equivalents of foreign patents already cited have been cited for the record.
- 14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E Vincent whose telephone number is 703-305-3607. The examiner can normally be reached on M F (8:30 6:00) Second Monday Off.

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- 15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.
- Any inquiry of a general nature or relating to the status of this application or proceeding 16. should be directed to the receptionist whose telephone number is 703-308-0651.

Sean E Vincent Primary Examiner Art Unit 1731

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